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EXAMINER
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BOYCE, ANDRE D

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3623

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/714,387  
Filing Date: November 16, 2000  
Appellant(s): COPELAND, KENNON R.

**MAILED**

SEP 06 2007

**GROUP 3600**

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Paul A. Ragusa  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 18, 2007 appealing from the Office action mailed May 1, 2006.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

USPN 6,032,125	Ando	02-2000
USPN 6,609,101	Landvater	08-2003
USPN 5,420,786	Felthausen et al	05-1995
USPN 6,021,394	Takahashi	02-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-10, 12, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (USPN 6,032,125), in view of Landvater (USPN 6,609,101).

As per claim 1, Ando discloses a method for estimating sales volume of an item (forecast model 6, figure 1) comprising: collecting sampled sales data for a reference period (13 month sales results, column 4, lines 34-36); receiving sampling sales data

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in a central processor (i.e., product master F1, figure 1); estimating total sales volume for the reference period (monthly forecast file F5, column 4, lines 59-61); parsing the reference period into a plurality of sub-periods (forecast result file F2, forecasting value of each week, column 4, lines 39-42), collecting sampled sales data for a current sub-period of interest (i.e., current week), the current sub-period of interest being later in time than the reference period (final forecasting result based on data of the current week, column 5, lines 35-38); matching the current sub-period to a corresponding sub-period from said plurality of sub-periods (last 18 weeks); calculating a sub-period specific projection factor for the corresponding sub-period (pattern outputting the forecasting value S13, column 5, lines 45-47); and applying said projection factor to said sales data from the current sub-period of interest to determine an estimate of total sales for the current sub-period (closest pattern is extracted and used to obtain the final forecasting result, column 5, lines 39-47).

Ando does not explicitly disclose collection of sampled sales data being later in time than the reference period. Landvater discloses the POS system 90 used to collect sales data to provide a sales history for use in creating a statistical forecast of projected sales and to update the perpetual inventory, thus providing daily collection and reporting of sales data later in time, to use in product forecasting (column 8, lines 13-21). Both Ando and Landvater are concerned with effective sales forecasting, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include collection of data being later in time

than the reference period in Ando, as seen in Landvater, as an additional effective determination of sales forecasting, making the Ando system more robust.

As per claim 2, Ando discloses the sub-periods are days of the week (frequency of forecasting may be daily, column 4, lines 26-29).

As per claim 3, Ando discloses the reference period is one-week (forecast result file F2).

As per claim 4, Ando discloses the current sub-period is a certain day of the week, the sub-periods of the reference period are days of the week and wherein the corresponding sub-period is the day of the week matching the certain day (daily forecasting result reflected in weekly forecasting, wherein the pattern from each day is compared to the same day of the previous week, as seen in Figure 2, which uses weeks instead of days, column 7, lines 41-45).

As per claim 6, Ando discloses the sample size for the reference period is larger than the sample size for the current sub-period of interest (sample size of the first 14 weeks versus the entire 18 week period, column 5, lines 56-59).

As per claim 7, Ando discloses a method of estimating daily sales volume (frequency of forecasting may be daily, column 4, lines 26-29) comprising: calculating in a central processor (i.e., forecast engine 7, figure 1) a day of the week specific projection factor based on reference sales history data (final forecasting result pattern S13, figure 3); sampling sales data for a current day of interest (i.e., current day, wherein final forecasting result based on data of the current day, column 5, lines 35-38); storing said sampled sales data in a data storage device

(i.e., product master F1, figure 1); scaling at least a portion of the sampled sales data for the current day of interest by the day of the week specific projection factor by a computer program at least partially controlling said central processor (i.e., forecast engine 7, figure 1) to determine an estimate of daily sales volume for the current day of interest (i.e., the pattern outputting the forecasting value closest to the actual sales results is extracted and obtained as the pattern of comparison, column 5, lines 34-38). Ando does not explicitly disclose said sampling of sales data occurring at an offset in time from the reference sales history data. Landvater discloses the POS system 90 used to collect sales data to provide a sales history for use in creating a statistical forecast of projected sales and to update the perpetual inventory, thus providing daily collection and reporting of sales data later in time, to use in product forecasting (column 8, lines 13-21). Both Ando and Landvater are concerned with effective sales forecasting, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include sampling occurring at an offset in time in Ando, as seen in Landvater, as an additional effective determination of sales forecasting, making the Ando system more robust.

As per claim 8, Ando discloses the reference sales history data includes sampled sales data for a reference week prior to the day of interest (daily forecasting would include data from last 18 weeks/day).

As per claim 9, Ando discloses the step of calculating the day of the week specific projection factor includes generating daily estimated sales volume for at

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least one day in the reference week (multiple patterns are calculated based upon the day of the week, see figures 2A-C as reference).

As per claim 10, Ando discloses the at least a portion of sampled sales data for the day of interest is the sampled data from those sources which have also provided data for the reference week (data from point-of-sales system at retail shop, column 4, lines 34-38).

As per claim 12, Ando discloses a method for estimating daily sales volume of an item (frequency of forecasting may be daily, column 4, lines 26-29) comprising: collecting sampled sales data from a first plurality of sources for a current day of interest (product master F1, collecting results from a retail shop, column 4, lines 34-38); receiving said sampled sales data in a central processor (i.e., product master F1, figure 1); estimating total sales volume for the reference week (demand forecasting for every week) by a computer program at least partially controlling said central processor (i.e., forecast engine 7, figure 1); parsing the sampled sales data and estimated total sales volume for the reference week by day of the week (daily forecasting result reflected in weekly forecasting, wherein the pattern from each day is compared to the same day of the previous week, as seen in Figure 2, which uses weeks instead of days, column 7, lines 41-45); selecting the parsed sales data and estimated total sales volume data for the day of the week in the reference week that matches the day of the week of the current day of interest (i.e., current day, wherein final forecasting result based on data of the current day, column 5, lines 35-38); calculating a day of the week specific projection factor for the current day of interest



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(most frequently appeared pattern in the past 18 weeks/days is used for forecasting the future 18 weeks/days, column 5, lines 48-55); and applying said projection factor to said sales data for the current day of interest to determine an estimate of total sales for the day of interest (closest pattern is extracted and used to obtain the final forecasting result, column 5, lines 39-47).

Ando does not explicitly disclose collecting sampled sales data for a reference week, said reference week being offset in time from said current day by a predetermined time period and collecting sampled sales data for a reference week from a second plurality of sources. Landvater discloses the POS system 90 used to collect sales data to provide a sales history for use in creating a statistical forecast of projected sales and to update the perpetual inventory, thus providing daily collection and reporting of sales data later in time, to use in product forecasting (column 8, lines 13-21). Further, Landvater discloses having one or more retail stores 23, where the POS information is collected (column 6, lines 46-49). Both Ando and Landvater are concerned with effective sales forecasting, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include sampled sales data for a reference week, said reference week being offset in time from said current day, and collecting sampled sales data from a plurality of sources in Ando, as seen in Landvater, thereby collecting data from multiple retail shops, making the Ando system more robust.

As per claim 13, Ando discloses the quantity of sampled sales data for the current day of interest is smaller than the quantity of sampled sales data for the

corresponding day of the week in the reference week (sample size of the first 14 weeks versus the entire 18 week period, column 5, lines 56-59).

Claim 17 is rejected based upon the rejections of claim 1, since it is the system claim corresponding to the method claim.

Claims 5, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (USPN 6,032,125), in view of Landvater (USPN 6,609,101), as applied to claims 4, 10, and 17, in further view of Felthausen et al (USPN 5,420,786).

As per claim 5, neither Ando nor Landvater disclose the item being a pharmaceutical product. Felthausen et al discloses product sales at pharmacies estimated (column 5, lines 59-61). Ando, Landvater, and Felthausen are concerned with effective product sales estimation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pharmaceutical product in the Ando system, as seen in Felthausen, thus making the Ando system more flexible and robust.

As per claim 11, neither Ando nor Landvater disclose the sources are retail pharmacies. Felthausen et al discloses product sales at pharmacies estimated (column 5, lines 59-61). Ando, Landvater, and Felthausen are concerned with effective product sales estimation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pharmaceutical product in the Ando system, as seen in Felthausen, thus making the Ando system more flexible and robust.

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As per claim 19, neither Ando nor Landvater disclose the sales data relates to pharmaceutical sales. Felthausen et al discloses product sales at pharmacies estimated (column 5, lines 59-61). Both Ando and Felthausen are concerned with effective product sales estimation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pharmaceutical product in the Ando system, as seen in Felthausen, thus making the Ando system more flexible and robust.

Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (USPN 6,032,125), in view of Landvater (USPN 6,609,101), as applied to claims 12 and 17, in further view of Takahashi (USPN 6,021,394).

As per claim 14, neither Ando nor Landvater disclose comparing said first plurality of sources to said second plurality of sources to determine the intersection of said sources and wherein the step of determining the day of the week specific projection factor applies sample data from said intersection of sources. Takahashi discloses comparing sales results of a plurality of vending machines in order to determine product sales estimates (column 5, lines 2-7). Ando, Landvater, and Takahashi are concerned with product forecasting, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to determine the intersection of said sources in the Ando system, as seen in Takahashi, making the Ando system more robust, by collecting and mining data from

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multiple retail shops that sell the same products, thereby determining more accurate forecasts.

Claim 18 is rejected based upon the rejection of claim 14, since it is the system claim corresponding to the method claim.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando (USPN 6,032,125), in view of Landvater (USPN 6,609,101), in further view of Takahashi (USPN 6,021,394), as applied to claim 14, in further view of Felthauser et al (USPN 5,420,786).

As per claim 15, neither Ando, Landvater, nor Takahashi disclose the sources are retail pharmacies. Felthauser et al discloses product sales at pharmacies estimated (column 5, lines 59-61). Ando Landvater, Takahashi, and Felthauser are concerned with effective product sales estimation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pharmaceutical product in the Ando system, as seen in Felthauser, thus making the Ando system more flexible and robust.

As per claim 16, neither Ando, Landvater, nor Takahashi disclose the item being a pharmaceutical product. Felthauser et al discloses product sales at pharmacies estimated (column 5, lines 59-61). Ando, Landvater, Takahashi, and Felthauser are concerned with effective product sales estimation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to

include a pharmaceutical product in the Ando system, as seen in Felthauser, thus making the Ando system more flexible and robust.

#### **(10) Response to Argument**

In the Appeal Brief, Appellant argues that 1) the Examiner has failed to point to any suggestion or motivation in either of the references or elsewhere that would lead a person of ordinary skill in the art to combine the disclosures of Ando and Landvater, 2) neither Ando nor Landvater disclose or suggest estimating the total daily sales of a product by using a projection factor derived from sampled historical sales data as applied to a sampling of current sales data, 3) neither Ando nor Landvater disclose or suggest the use of sampled sales data from a reference period to estimate the total sales volume for the reference period, and 4) neither Ando nor Landvater disclose the use of sampled sales data scaled by a projection factor to calculate the current total sales.

With respect to argument 1, the Examiner respectfully disagrees. As discussed in the *KSR International Co. v. Teleflex Inc. et al.*, 550 U.S. \_\_\_\_ (2007), "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F. 3d 977, 988 (CA Fed.

2006) ('[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness'). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." As such, *KSR* forecloses Appellant's argument that a specific teaching is required for a finding of obviousness.

With respect to argument 2, the Examiner respectfully disagrees. First, the Examiner notes that none of the independent claims 1, 7, 12 or 17 contain the limitation "estimating the total daily sales of a product by using a projection factor derived from sampled historical sales data as applied to a sampling of current sales data," as asserted by Appellant. Appellant seems to have combined various elements of the claims to develop a limitation not currently recited in any of the claims. Second, as seen in claim 1, Ando discloses calculating a sub-period specific projection factor for the corresponding sub-period (i.e., pattern outputting the forecasting value S13, column 5, lines 45-47); and applying said projection factor to said sales data from the current sub-period of interest to determine an estimate of total sales for the current sub-period (i.e., closest pattern is extracted and used to obtain the final forecasting result, column 5, lines 39-47), wherein the extracted pattern is the projection factor applied to the current time period (e.g., week). In addition, Ando discloses a forecast engine 7 (figure 1), wherein the pattern

outputting the forecasting value closest to the actual sales results is extracted and obtained as the pattern of comparison (column 5, lines 34-38).

With respect to argument 3, the Examiner respectfully disagrees. Again, the Examiner notes that Appellant seems to have combined various elements of the claims to develop a limitation not currently recited in any of the claims.

Nevertheless, Ando discloses collecting sampled sales data for a reference period (13 month sales results, column 4, lines 34-36), and collecting sampled sales data for a current sub-period of interest (i.e., current week), the current sub-period of interest being later in time than the reference period (final forecasting result based on data of the current week, column 5, lines 35-38).

With respect to argument 4, the Examiner respectfully disagrees. Again, the Examiner notes that Appellant seems to have combined various elements of the claims to develop a limitation not currently recited in any of the claims.

Nevertheless, Ando discloses calculating a sub-period specific projection factor for the corresponding sub-period (i.e., pattern outputting the forecasting value S13, column 5, lines 45-47); and applying said projection factor to said sales data from the current sub-period of interest to determine an estimate of total sales for the current sub-period (i.e., closest pattern is extracted and used to obtain the final forecasting result, column 5, lines 39-47), wherein the extracted pattern is the projection factor applied to the current time period (e.g., week).

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

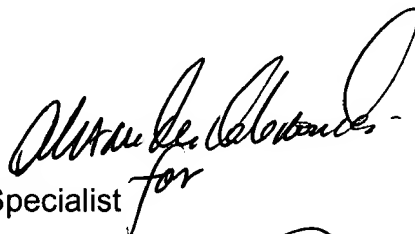
Respectfully submitted,



Andre Boyce  
August 31, 2007

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